Figure 3–20. View of the Moab Site Tailings Pile from Southbound US-191

3.1.16 Infrastructure

3.1.16.1 Waste Management

Nonradioactive solid waste at the Moab site is disposed of by a commercial contractor in the Grand County landfill, which has a remaining projected lifespan of 64 years at a disposal rate of 30,000 to 35,000 yd^3 per year.

Currently, two portable toilets are on the site for managing nonradioactive sanitary waste. Each portable toilet can support up to 25 workers. The sanitary waste is emptied from the portable toilet one or two times per week, depending on the size of the on-site workforce and is disposed of by a commercial contractor in the Moab sewage treatment plant, which has a capacity of 1.5 million gallons per day. The treatment plant currently treats an average of 800,000 to 900,000 gallons per day; it restricts discharge of concentrated sewage from portable toilets to 9,000 gallons per day and limits receipts to 3 days per week.

3.1.16.2 Electrical Power Supplies

A three-phase overhead power line runs along the north boundary of the property, and an electrical substation on the property feeds power to the site. The electrical utility servicing the site is Utah Power, a subsidiary of PacifiCorp.

3.1.16.3 Water

The Moab site has its own pump station that can pump nonpotable water from the Colorado River. DOE currently has a water right for consumptive use of Colorado River water at the Moab site of 3.3 cfs (approximately 2,366 acre-feet per year). This right includes an additional 3.03 cfs (about 2,194 acre-feet per year) for nonconsumptive use. Potable water is available in the city of Moab. The city's potable water supply system is provided by the Glen Canyon aquifer (see Section 3.1.6.4) and can produce 3 million to 5 million gallons per day.

3.1.17 Transportation

3.1.17.1 Vehicular Traffic

US-191 provides highway access to the Moab site. It is generally two lanes wide but does have occasional passing lanes. Originating at the Arizona-Utah border and terminating at the Crescent Junction and I-70 intersection, US-191 provides north-south travel access in eastern Utah and also carries significant truck traffic. As much as 30 percent of the total vehicle volume consists of trucks.

Table 3–15 presents a summary of annual average daily traffic (AADT) counts, degree of congestion, percentage of truck traffic, number of accidents, and accident rates for US-191 between the White Mesa Mill site and Crescent Junction where it intersects with I-70. AADT volume is based on vehicle counts from continuously operating automatic traffic counters that do not discern direction of travel. The reported AADT is a combination of vehicles traveling in both directions for a specific route segment. Congestion is a reflection of the actual number of vehicles on a highway segment in relation to how many the road can safely handle. Various other factors, such as the geometry of the roadway and number of lanes, are also considered in determining whether a road is congested. Truck traffic is defined as single-unit delivery trucks or larger sized vehicles. Truck traffic is shown as a percent of the AADT. Accident rates are determined by comparing actual recorded crashes to expected accident rates for a specific road segment and per 1 million miles of vehicle travel. Expected accident rates are a 5-year average of accidents that occur on similar highway segments and include all types of vehicles. The rates provided in Table 3–15 are based on the 1997–2001 time period (Ames 2003).

As shown in Table 3–15, central Moab is considered congested and had a high accident rate of 3.5 accidents per 1 million miles of vehicular travel in 2001. Based on accident averages, it was expected to have an accident rate of 1.77. US-191 increases to four lanes in the downtown area to accommodate the increase in traffic. Within 1,400 ft of the north city limits, US-191 reduces to two lanes, congestion is no longer a problem, and the accident rate reduces to low, which is characteristic of most sections of US-191 (Ames 2003). It is assumed that the large increase in traffic volume in the downtown area reflects downtown business activity and cross traffic that stays within the city. No state or federal routes converge with US-191 in Moab.

The city of Moab is concerned about traffic congestion within the central area, which continues to get progressively worse as the city grows and attracts increasing tourism and tourism-related commerce and recreation. The city has considered a bypass to relieve traffic congestion; however, it has not yet begun a feasibility study (Vaughn 2003). UDOT plans to replace the existing pavement on US-191 in central Moab and work on utility improvements during the next 2 years, which will temporarily increase the already high level of congestion (Manwill 2003).